IMPORTANT

BREAK-IN INFORMATION FOR YOUR MOTORCYCLE

The first 1,000km(600miles) are the most important in the life of your motorcycle .
Proper break-in operation during this time will help ensure maximum life and performance from your new motorcycle.
Hyosung parts are manufactured of high quality materials, and manufactured parts are finished to close tolerances. Proper break-in operation allows the machined surfaces to polish each other and mate smoothly.

Motorcycle reliability and performance depend on special care and restraint exercised during the break-in period. It is especially important that you avoid operating the engine in a manner which could expose the engine parts to excessive heat.

Please refer to the BREAK-IN section for specific break-in recommendations.

WARNING/CAUTION/NOTE

Please read this manual and follow its instructions carefully. To emphasize special information the words 『WARNING』, 『CAUTION』 and 『NOTE』 carry special meanings and should be carefully reviewed.

⚠ WARNING

The personal safety of the rider may be involved. Disregarding this information could result in injury to the rider.

⚠ CAUTION

These instructions point out special service procedures or precautions that must be followed to avoid damaging the machine.

NOTE: This provides special information to make maintenance easier or important instructions clearer.

FOREWORD

THANK YOU for choosing **Hyosung**. We at **Hyosung** have designed, tested and produced this motorcycle using the most modern technology available to provide you with many happy, enjoyable, safe riding. Motorcycling is one of the most exhilarating sports and insure your riding enjoyment, you should become throughly familiar with the information presented in this Owner's Manual before riding the motorcycle.

The proper care and maintenance that your motorcycle requires are outlined in this manual. By following these instructions explicitly you will insure a long trouble-free operating life for your motorcycle. Your Hyosung dealer has experienced technicians that are trained to provide your machine with the best possible service with the right tools and equipment.

All information, illustrations photographs and specifications contained in this manual are based on the latest product information available at the time of publication. Due to improvements or other changes, there may be some discrepancies in this manual. **Hyosung** reserves the right to make changes at any time.

Please note that this manual applies to all specifications for all respective destinations and explains all equipments. Therefore, your model may have different standard features than shown in this manual.

HYOSUNG MOTORS & MACHINERY INC.
Overseas Technical Department

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CONSUMER INFORMATION

ACCESSORY INSTALLATION AND PRECAUTION SAFETY TIPS

There are a great variety of accessories available to **Hyosung** owners. **Hyosung** can not have direct control over the quality or suitability of accessories you may wish to purchase except genuine parts. The addition of unsuitable accessories can lead to unsafe operating conditions. It is not possible for **Hyosung** to test each accessory on the market or combinations of all the available accessories, however, your dealer can assist you in selecting quality accessories and installing them correctly.

Use extreme caution when selecting and installing the accessories for your **Hyosung**. We have developed some general guidelines which will aid you when deciding whether, and how to equip your motorcycle.

1. In case that additional weight or aerodynamic affecting accessories are installed, they should be mounted as low as possible, as close to the motorcycle and as near the center of gravity as is feasible. The mounting brackets and other attachment hardware should be carefully checked to ensure that it provides for a rigid, nonmovable mount. Weak mounts can allow the shifting of the weight and create a dangerous, unstable condition.
2. Inspect for proper ground clearance and bank angle. An improperly mounted load could critically reduce these two safety factors. Also determine that the "load" does not interfere with the operation of the suspension steering or other control operations.
3. Accessories fitted to the handlebars or the front fork area can create serious stability problems. This extra weight will cause the motorcycle to be less responsive to your steering control. The weight may also cause oscillations in the front end and lead to instability problems. Accessories added to the machine should be as light as possible and kept to a minimum.
4. The motorcycle may be affected by a lifting condition or by an instability in cross winds or when being passed or passing large vehicles. Improperly mounted or poorly designed accessories can result in an unsafe riding condition, therefore caution should be used when selecting and installing all accessories.
5. Certain accessories displace the rider from his or her normal riding position. This limits the freedom of movement of the rider and may limit his or her control ability.
6. Additional electrical accessories may over load the existing electrical system. Severe overloads may damage the wiring harness or create a dangerous situation due to the loss of electrical power during the operation of the motorcycle.

When carrying a load on the motorcycle, mount it as low as possible and as close as possible to the machine. An improperly mounted load can create a high center of gravity which is very dangerous and makes the motorcycle difficult to handle. The size of the "load" can also affect the aerodynamics and handling of the motorcycle.
Balance the load between the left and right side of the motorcycle and fasten it securely.

MODIFICATION

Modification of the motorcycle, or removal of original equipment may render the vehicle unsafe or illegal.

SAFE RIDING RECOMMENDATION FOR MOTORCYCLE RIDERS

Motorcycle riding is great fun and an exciting sport. Motorcycle riding also requires that some extra precautions be taken to ensure the safety of the rider and passenger. These precautions are:

⊙ WEAR A HELMET

Motorcycle safety equipment starts with a quality safety helmet. One of the most serious injuries that can happen is a head injury. ALWAYS wear a properly approved helmet. You should also wear a suitable eye protection.

⊙ RIDING APPAREL

Loose fancy clothing can be uncomfortable and unsafe in terms of riding your motorcycle.
Choose good quality motorcycle riding apparel in terms of riding your motorcycle.

⊙ INSPECTION BEFORE RIDING

Review throughly the instructions in the "INSPECTION BEFORE RIDING" section of this manual. Do not forget to perform an entire safety inspection to ensure the safety of the rider and its passenger.

⊙ FAMILIARIZE YOURSELF WITH THE MOTORCYCLE

Your riding skill and mechanical knowledge form the foundation for safe riding practices. We suggest that you practice riding your motorcycle in a non-traffic situation until you are thoroughly familiar with your machine and its controls. Remember practice makes perfect.

⊙ KNOW YOUR LIMITS

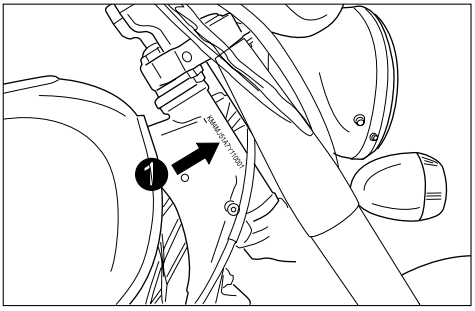
Ride within the boundaries of your own skill at all times. Knowing these limits and staying within them will help you to avoid accidents.

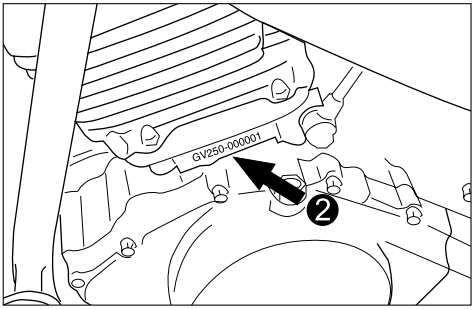
⊙ BE EXTRA SAFETY CONSCIOUS ON BAD WEATHER DAYS

Riding on bad weather days, especially wet ones, requires extra caution. Braking distances double on a rainy day. Stay off of the painted surface marks, manhole covers and greasy appearing areas as they can be especially slippery.
Use extreme caution at railway crossings and on metal gratings and bridges. Whenever you have a doubt about road condition, slow down!

SERIAL NUMBER LOCATION

The frame and/or engine serial numbers are used to register the motorcycle. They are also to assist your dealer in terms of ordering parts or referring to special service information.





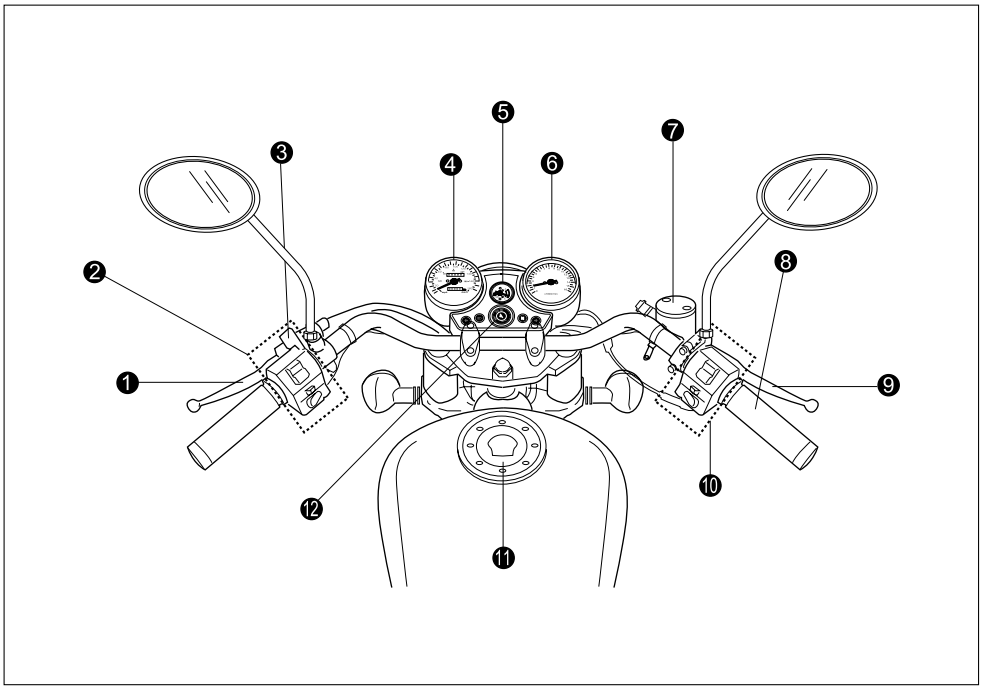
The frame number ① is stamped on the steering head tube.

The engine serial number ② is stamped on the left upside of the crankcase assembly.

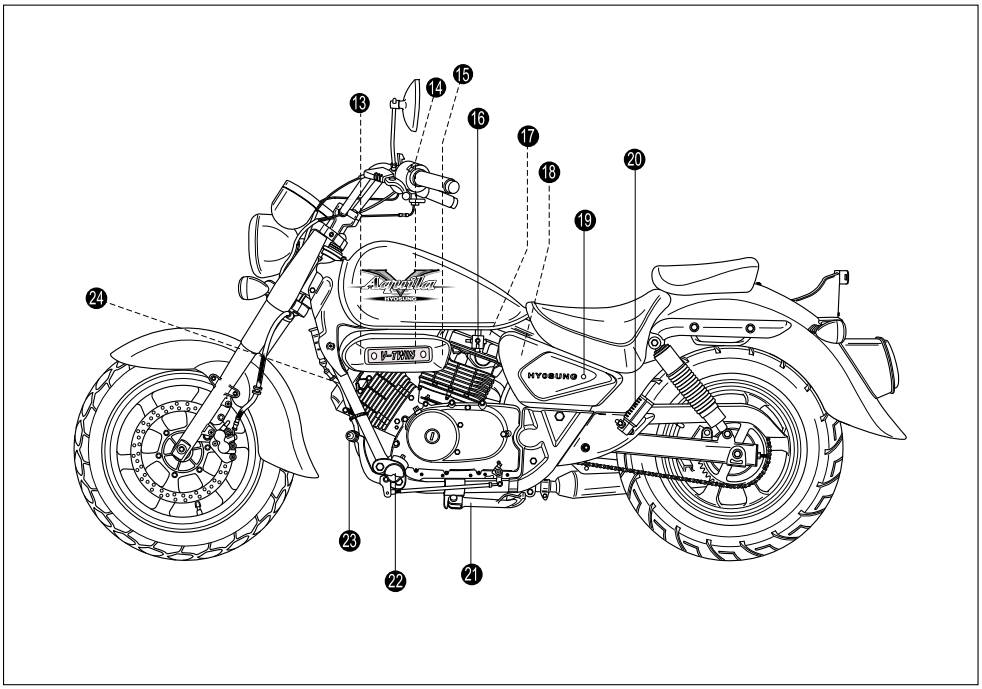
Please write down the numbers in the box provided below for your future reference.

Frame number:
Engine number:

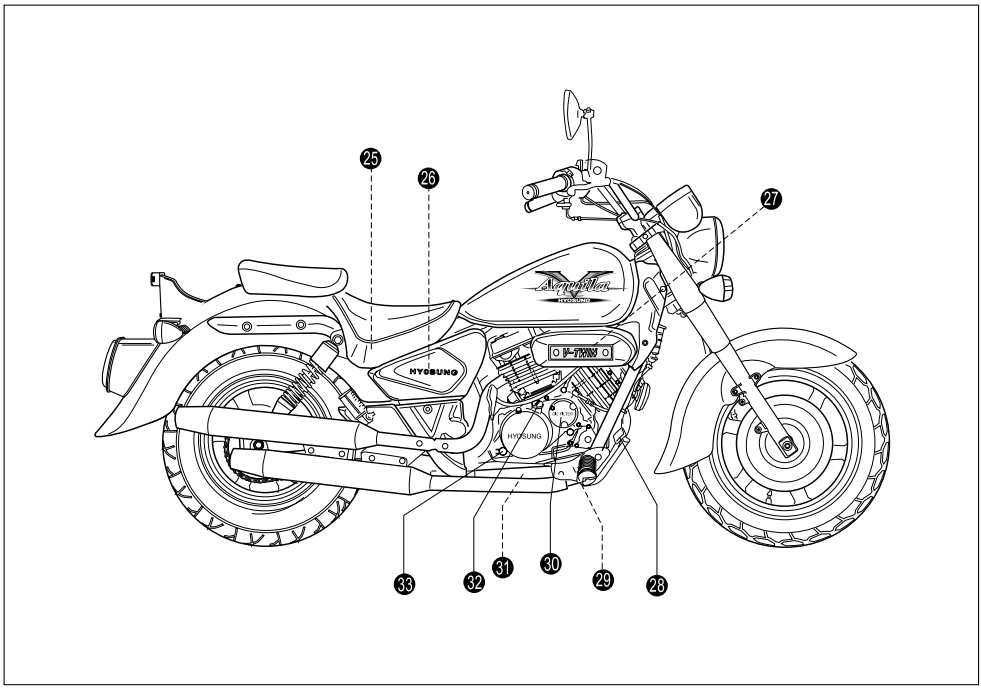
NAMES OF EACH PARTS



① Clutch lever
② Left handle switches
③ Choke lever
④ Speedometer
⑤ Fuel gauge
⑥ Tachometer
⑦ Front brake fluid reservoir
⑧ Throttle grip
⑨ Front brake lever
⑩ Right handle switches
⑪ Fuel tank cap
⑫ Ignition switches



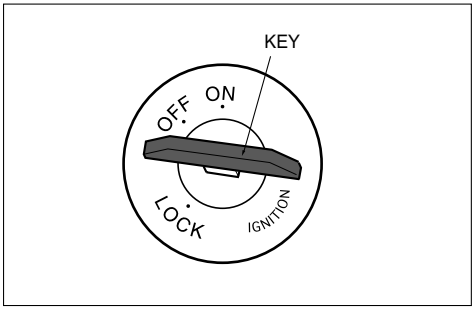
⑬ Ignition coil (Front)
⑭ Throttle stop screw
⑮ Ignition coil (Rear)
⑯ Fuel cock
⑰ Spark plug (Rear)
⑱ Fuel pump
⑲ Seat lock
⑳ Passenger footrests
㉑ Side stand
㉒ Footrests
㉓ Gearshift lever
㉔ Spark plug (Front)



㉕ Tools
㉖ Battery and fuse
㉗ Air cleaner
㉘ Rear brake pedal
㉙ Rear brake lamp switch
㉚ Engine oil filter
㉛ Engine oil drain plug
㉜ Engine oil filler cap
㉝ Engine oil level lens

CONTROLS

IGNITION SWITCH



The ignition switch has three positions:

⊙ "OFF" POSITION

All electrical circuits are cut off.
The engine will not start. The key can be removed.

⊙ "ON" POSITION

The ignition circuit is completed and the engine can now be started. The key cannot be removed from the ignition switch in this position.

⊙ "LOCK" POSITION

To lock the steering, turn the handlebar all the way to the left. Push down the key to the "OFF" position and turn it to the "LOCK" position after come up again and remove the key. All electrical circuits are disconnected.

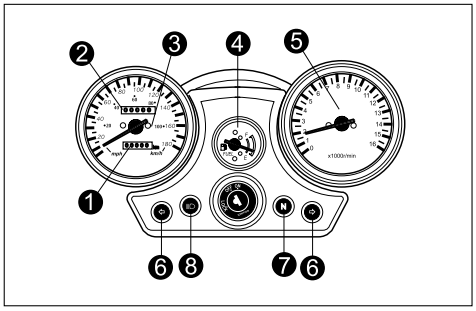
IGNITION KEY

Aquila 250 comes equipped with a pair of identical ignition keys. Keep the spare key in a safe place.

Your motorcycle ignition keys are stamped with an identifying number. This number is used when making replacement keys. Please write your key number in the box provided for your future reference.

Key number:

INSTRUMENT PANEL



① TRIP METER

The trip meter is a resettable odometer located in the speedometer assembly. It can be used to indicate the distance traveled on short trip or between fuel stops. Pressing control button will return the meter to zero.

② ODOMETER

The odometer registers the total distance that the motorcycle has been ridden.

③ SPEEDOMETER

The speedometer indicates the road speed in kilometers and miles per hour.

④ FUEL GAUGE

It indicates the remaining fuel amount in the fuel tank. The "F"(Full) mark indicates the fuel tank is full. The "E"(Empty) mark indicates the fuel tank is empty or nearly so. (the remaining fuel is 2.0 ℓ at "E"(Empty) the capacity is 14.0 ℓ)
Fill the fuel tank before "E"(Empty).

⚠ CAUTION

The fuel gauge indicates the remaining amount whenever the ignition switch is "ON" or "OFF". For checking the remaining amount of fuel, hold the motorcycle vertically and set the ignition switch "ON".

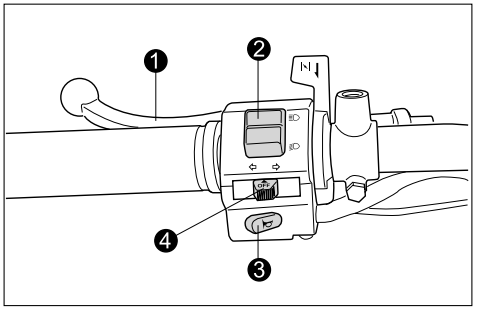
⑤ **TACHOMETER**
The tachometer indicates the engine speed in revolutions per minute(r/min).

⑥ **TURN SIGNAL INDICATOR LAMP**
When the turn signals are being operated either to the right or to the left, the indicator will flash at the same time.

⑦ **NEUTRAL INDICATOR LAMP**
The neutral indicator lamp will come on when the transmission is in neutral.
The lamp will go out when you shift into any gear other than neutral.

⑧ **HIGH BEAM INDICATOR LAMP**
The high beam indicator lamp will come on when the headlamp high beam is turned on.

LEFT HANDLE SWITCH



① **CLUTCH LEVER**
Using to cut off dilivering power at rear wheel when starting engine or shifting gear.

② **DIMMER SWITCH**
Change direction of headlamp light.

⊙ "≡D" **:** The headlamp high beam and tail-lamp come on.
The high beam indicator lamp also comes on.

⊙ "≡D" **:** The headlamp low beam and tail-lamp come on.

⚠ WARNING

Set the dimmer switch "≡D" when other vehicle is running in front or against.

③ **HORN SWITCH**
Press the switch to operate the horn.

④ **TURN SIGNAL SWITCH**
Using when left, right turn or change direction.

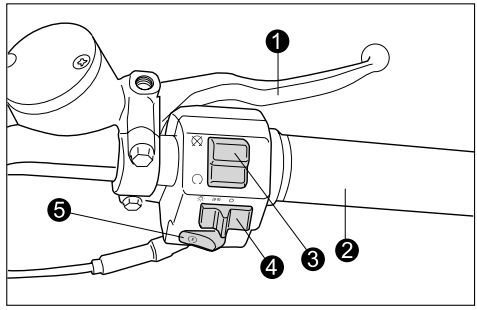
⊙ "⇦" **Position :** Flash the left turn signal lamp.

⊙ "⇨" **Position :** Flash the right turn signal lamp.

⚠ CAUTION

Always use the turn signals when you intend to change lanes or make a turn. Always be sure to turn the turn signal switch to the "OFF" position after completing the turn or lane change.

RIGHT HANDLE SWITCH



① FRONT BRAKE LEVER

The front brake is applied by squeezing the brake lever gently toward the throttle grip.
Front brake be anxious about motorcycle falling down when braking suddenly as disk brake system. The brake lamp will come on when the lever is squeezed.

② THROTTLE GRIP

Engine speed is controlled by position of the throttle grip. Turn it toward you to increase engine speed. Turn it away from you to decrease the engine speed.

③ ENGINE STOP SWITCH

⊙ "⊗" **Position :** Using when dangerous condition of falling down during drive and others or engine stop suddenly. The ignition circuit is off. The engine cannot start or run.

⊙ "○" **Position :** Using when need operation of engine as drive and others. The ignition circuit is on and the engine can run.

④ LIGHT SWITCH

⊙ "☼" **position**

The headlamp, position lamp, meter lamp and taillamp come on. If not start engine, do not come on.

⊙ "≡D≡" **position**

The position lamp, meter lamp and taillamp come on.

⊙ "○" **position**

The headlamp, meter lamp and taillamp go off.

⑤ STARTER SWITCH

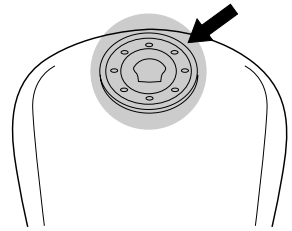
Use this switch to operate the starter motor.

With the ignition switch in the "ON" position, the engine stop switch in the "○" position, and the transmission is in neutral, pull in the clutch lever and push the starter switch to start the engine.

⚠ CAUTION

Do not engage the starter motor for more than five seconds at a time as it may overheat the wiring harness and starter motor. If the engine does not start after several attempts, check the fuel supply and ignition system. (Refer to Page 40)

SUPPLY OF GASOLINE



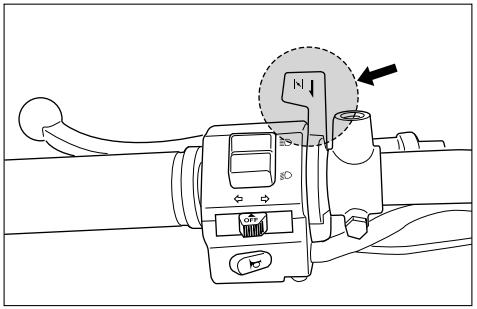
To open the fuel tank cap, insert the ignition key into the lock and turn it clockwise. With the key inserted, lift the cap up with the key.
To close the fuel tank cap, push the cap down firmly with the key in the cap lock.

⚠ WARNING

Fuel and fuel vapor are highly flammable and toxic. You can be burned or poisoned when refueling.

- **Stop the engine and keep flames, sparks and heat sources away.**
- **Refuel only outdoors or in a well ventilated area.**
- **Do not smoke.**
- **Wipe up spills immediately.**
- **Avoid breathing fuel vapor.**
- **Keep children and pets away.**

CARBURETOR CHOKE LEVER



The carburetor is equipped with a choke system to provide easy starting when the engine is cold.
When starting the cold engine, turn the choke lever all the way toward you. The choke works best when the throttle is in the closed position. When the engine warm, you do not need to use the choke system for starting.

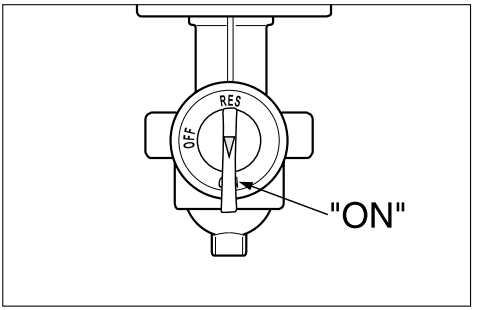
⚠ CAUTION

If keep running in condition that full choke lever, cause in fuel excess exhaustion, high speed not running, damage of ignition plug.

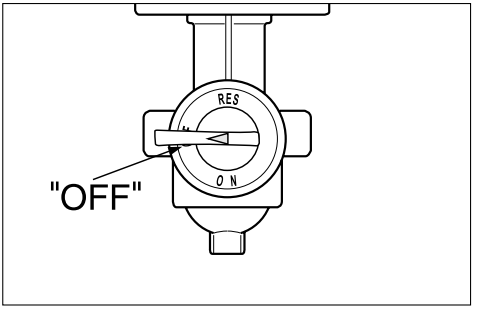
FUEL COCK

Aquila 250 is equipped with a manually operated fuel cock.
There are three position : "ON", "OFF" and "RES".

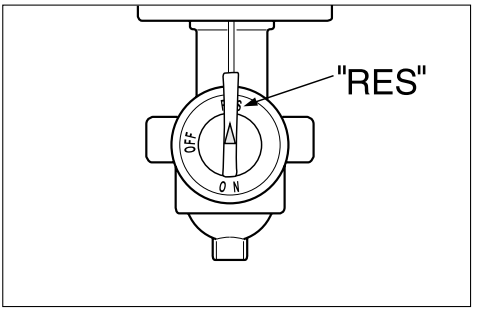
⊙ **"ON" Position**
The normal operating position for the fuel cock lever is in the "ON" position.



⊙ **"OFF" Position**
Turn the lever to the "OFF" position whenever stopping the engine for more than a few minutes.



⊙ **"RES" (RESERVE) Position**
If the fuel level in the tank is too low, turn the lever to the "RES" position to use the 2.0 ℓ of reserve fuel supply.



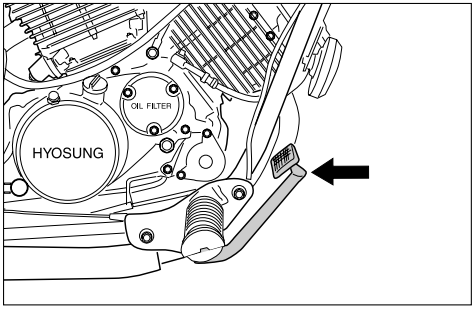
※ Confirm the each mark by "△" mark at the fuel cock lever.

⚠ CAUTION

After switching the fuel cock lever to the "RES" position, it is advisable that the tank be refilled at the closest gas station. After refueling be sure to move the fuel cock to the "ON" position.

REAR BRAKE PEDAL

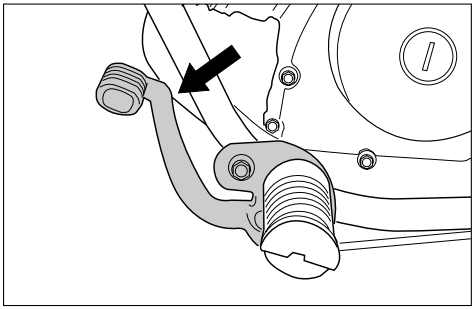
Depressing the rear brake pedal will apply the rear brake.
The brake lamp will be illuminated when the rear brake is operated.

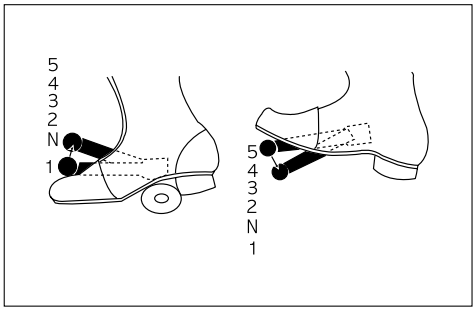


⚠ WARNING

When brake rear brake, haste braking pay attention surely to occure accident of vehicle falling down.

GEARSHIFT LEVER



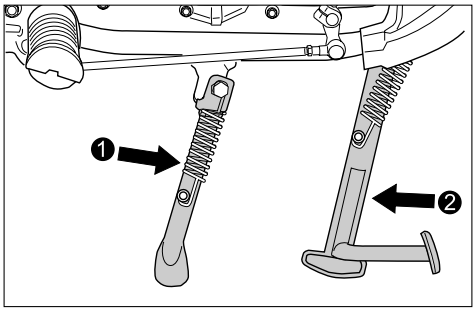


Aquila 250 has a 5-speed transmission which operates as shown.
To shift properly, pull the clutch lever and close the throttle at the same time you operate the gearshift lever. Each time that a gear is selected, the gearshift lever will return to its normal position ready to select the next gear.
Lift the gearshift lever to upshift and depress the lever to downshift.
Neutual is located between first and 2nd gear.
When neutral is desired, depress or lift the lever halfway between first and 2nd gear.
It is not possible to upshift or downshift more than one gear at a time.
When shifting from first to 2nd gear or 2nd gear to low, neutral will be automatically skipped.
Reduce the motorcycle speed before down-shifting.
When down-shifting, the engine speed should be increased before the clutch is engaged.
This will prevent unnecessary wear on the drive train components and the rear tire.

⚠ CAUTION

When the transmission is in neutral the green indicator lamp on the instrument panel will be lit.
However, even though the light is illuminated, cautiously release the clutch lever slowly to determine whether the transmission is positively in neutral.

STAND



① **Side stand**

Aquila 250 is equipped with the side stand ignition interlock system.

1. If the transmission is in neutral, you can start the engine regardless of clutch lever and side stand.
2. If the transmission is not in neutral, you can only start the engine with pulling in clutch lever and side stand up.

No	Neutral	Clutch	Side stand	Engine Start
1	●	△	△	Possible
2	△	●	●	Possible
3	△	●	△	Impossible
4	△	△	●	Impossible

NOTE:

Neutral - Neutral switch
Clutch - Clutch lever
● - On or UP.
△ - Off or Down

⚠ CAUTION

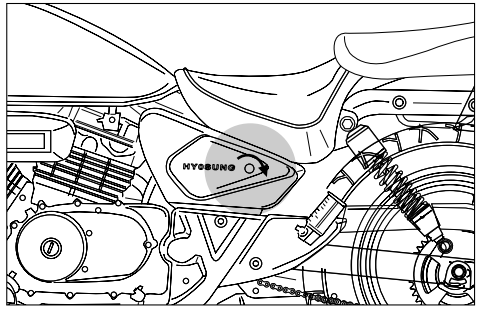
Before starting off, check that the side stand is returned to fully upper position and is not hanging down.

⚠ WARNING

Riding with the side stand incompletely retracted can result in an accident when you turn left.

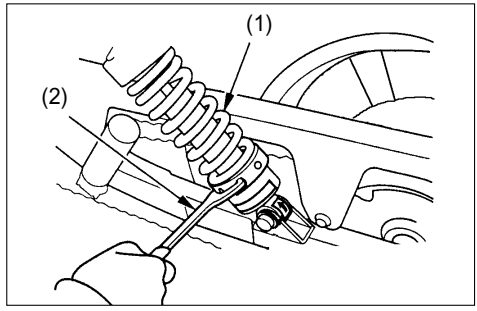
- **Check operation of the side stand/ignition interlock system before riding.**
- **Always retract the side stand completely before starting off.**

SEAT LOCK



The seat lock is located left under of the seat.
To unlock the seat, insert the ignition key into the lock and turn it counter-clockwise.
To lock the seat, push down firmly until the seat latch snaps into the lock position.

REAR SUSPENSION



(1) Rear shock absorber (2) Pin spanner

To adjust the spring pre-load, turn the adjuster clockwise or counter-clockwise to the desired position with the pin spanner.
Position 1 provides the softest spring pre-load and position 5 provides the stiffest.
Aquila 250 is delivered from the factory with its adjuster set on position 1.

⚠ WARNING

Unequal suspension adjustment can cause poor handling and loss of stability. Adjust the right and left shock absorber to the same settings.

FUEL AND OIL RECOMMENDATION

★ FUEL

Use unleaded gasoline with an octane rating or higher.
Unleaded gasoline can extend spark plug life and exhaust components life.

⚠ CAUTION

Spilling gasoline can damage pointed surfaces.
Be careful not to spill any fuel when filling the fuel tank.
Wipe spilled gasoline up immediately.

⚠ WARNING

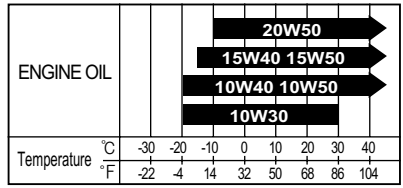
- **When refueling, always shut the engine off and turn the ignition key to the "OFF" position. Never refuel near the flames, sparks and heat sources.**
- **Do not overfill the fuel tank. Do not fill the fuel tank above the entrance lower end.**

★ ENGINE OIL

■ ENGINE OIL SPECIFICATION

Classification system	Grade	Remarks
API	SF or SG	
SAE	10 W - 40	

※ *If a SAE 10 W - 40 motor oil is not available, select and alternative according to the following chart.*



Using a premium quality four stroke motor oil will increase the service life of your motorcycle.

⚠ WARNING

- **Don't mix the unrecommended oil. It could damage the engine.**
- **When refilling the oil tank, don't allow the dust to get inside.**
- **Mop the oil spilt.**
- **Don't put the patch on the cap. It could disturb the oil to be provided and damage the engine.**

BREAK-IN

The opening explains how important proper break-in is to achieve maximum life and performance from your new Hyosung. The following guidelines explain proper break-in procedures.

★ MAXIMUM THROTTLE OPENING RECOMMENDATIONS

The table below shows the maximum throttle opening recommendation during the break-in period.

Initial 800km (500miles)	**Less than 1/2 throttle**
Up to 1,600km (1,000miles)	**Less than 3/4 throttle**

★ AVOID CONSTANT LOW SPEED

Operating the engine at constant low speed (light load) can cause parts to glaze and not seat in.
Allow the engine to accelerate freely through the gear, without exceeding the recommended maximum limits.
Do not, however use full throttle for first 1,600km (1,000miles).

★ VARY THE ENGINE SPEED

The engine speed should be varied and not held at a constant speed.
This allows the parts to be "loaded" with pressure and then unloaded, allowing the parts to cool.
This aids the mating process of the parts. It is essential that some stress be placed on the engine components during break-in to ensure this mating process.
Do not, though, apply excessive load on the engine.

★ BREAKING IN THE NEW TIRES

New tires need proper break-in to assure maximum performance, just as the engine does.
Wear in the tread surface by gradually increasing your cornering lean angles over the first 160km(100miles) before attempting maximum performance. Avoid hard acceleration, hard cornering, and hard braking for the first 160km(100miles).

⚠ WARNING

Failure to perform break-in of the tires could cause tire slip and loss of control. Use extra care when riding on new tire. Perform proper break-in of the tire as described in this section and avoid hard acceleration, hard cornering, and hard braking for the first 160km(100miles).

★ ALLOW THE ENGINE OIL TO CIRCULATE BEFORE RIDING

Allow sufficient idling time after warm or cold engine start up before applying load or reviving the engine. This allows time for the lubricating oil to reach all critical engine components.

★ OBSERVE YOUR FIRST, AND MOST 1,000km SERVICE

The 1,000km (600miles) service is the most important service your motorcycle will receive.
During break-in procedures all of the engine components will have worn in and all of the other parts will have seated in.
All adjustments will be restored, all fasteners will be tightened, and the dirty engine oil and engine oil filter will be replaced.
Timely performance of the 1,000km (600miles) service will ensure optimum service life and performance from the engine.

⚠ CAUTION

Service should may be peformed before 1,000km(600miles) on motorcycle that are used under severe conditions.

⚠ CAUTION

The 1,000km (600miles) service should be performed as outlined in the INSPECTION AND MAINTENANCE section of this Owner's Manual. Pay particular attention to the 『CAUTION』 and 『WARNING』 in that section.

INSPECTION BEFORE RIDING

Before riding the motorcycle, be sure to check the follwing item.
Inspect every day once them before riding the motorcycle.

- **Abnormal point of the previous day.**
- **Extra braking power of the brake lever.**
- **Fluid measure of the master cylinder.**
- **Pressure, crack, cut, strange wear, foreign substance (stone, nail and others) of Tire.**
- **Adequate tread depth of Tire.**
- **Fluid measure of Engine oil.**
- **Pollution degree inspect of Engine oil.**
- **Fluid measure of Fuel.**
- **On and off condition or damage of Lamp, turn signal lamp and others.**
- **Condition of rear-view mirror.**

PERIODIC MAINTENANCE

The chart indicates the intervals between periodic service in kilometers.
At the end of each interval, be sure to in spect, check, lubricate and service as instructed.
If your motorcycle is used under high stress conditions such as continuous full throttle operation, or is operated in a dusty climate, certain services should be performed more often to ensure reliability of the machine as explained in the maintenance section.
Your Hyosung dealer can provide you with further guide lines.
Steering components, suspensions and require very special and careful servicing. For maximum safety we suggest that you have these items inspected and serviced by your authorized Hyosung dealer or a qualified service mechanic.

⊙ LUBRICATION POINTS

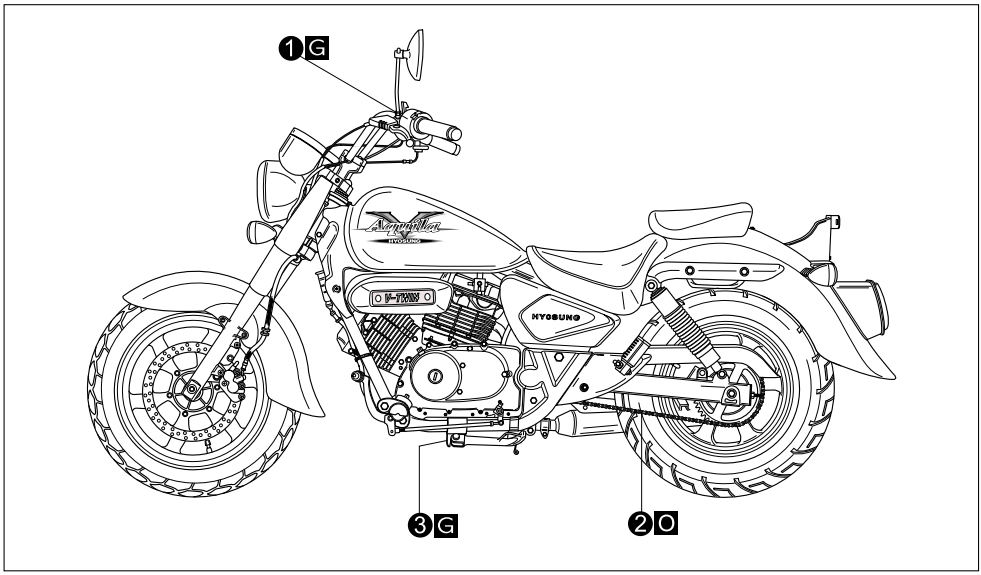
Proper lubrication is important for smooth and long life of each working part of your motorcycle and also for safe riding. It is a good practice to lubricate the motorcycle after a long rough ride or after it gets wet in the rain or after washing it.
Major lubrication points are indicated as follows.

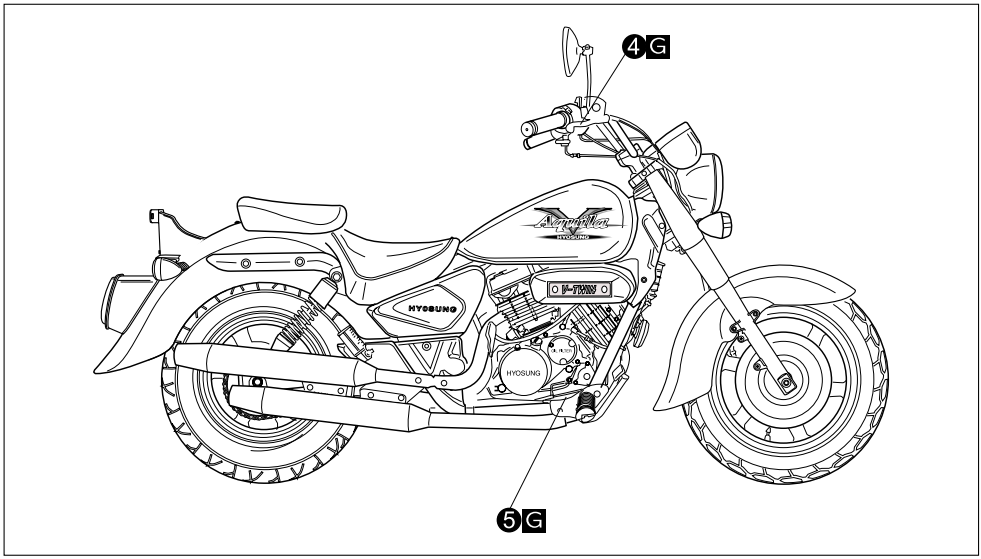
⚠ WARNING

Improper maintenance or failure to perform recommended maintenance increases the chance of an accident or motorcycle damage.

⚠ CAUTION

Using poor quality replacement parts can cause your motorcycle to wear more quickly and may shorten its useful life.
Use only genuine Hyosung replacement parts or their equivalent.





① Clutch lever holder
② Drive chain
③ Side stand pivot and spring hook
④ Brake lever holder
⑤ Brake pedal pivot

O - Motor oil
G - Grease

⊙ **ENGINE**

Item \ Interval	First 1,000 km	Every 4,000 km	Every 8,000 km
Air cleaner element	Clean every 3,000 km · Replace every 12,000 km		
Exhaust pipe bolts and muffler mounting bolts ★	Tighten	Tighten	—
Valve clearance adjust ★	Inspect	Inspect	—
Spark plug	Clean	Clean	Replace
Fuel hose	Inspect	Inspect	—
	Replace every 4 years		
Engine oil filter	Replace	Replace	—
Engine oil	Replace	Replace	—
Throttle cable	Inspect	Inspect	—
Idle speed	Inspect	Inspect	—
Clutch	Inspect	Inspect	—

⊙ **CHASSIS**

Item \ Interval	First 1,000 km	Every 4,000 km	Every 8,000 km
Drive chain	Clean and lubricate every 1,000 km		
Brake ★	Inspect	Inspect	—
Brake hose	Inspect	Inspect	—
	Replace every 4 years		
Brake fluid	Inspect	Inspect	—
	Replace every 2 years		
Tire	Inspect	Inspect	—
Steering ★	Inspect	Inspect	—
Front forks ★	—	Inspect	—
Rear suspension ★	—	Inspect	—
Chassis nuts and bolts ★	Tighten	Tighten	—

⚠ CAUTION

More frequent servicing may be performed on motorcycles that are used under severe conditions.

NOTE

★ = Ask your Hyosung dealer or qualified mechanic to do the maintenance items marked.

RIDING TIPS

STARTING THE ENGINE

Before attempting to start the engine make sure:

1. The transmission is in neutral.
2. The fuel cock lever is in the "**ON**" position.
3. The engine stop switch is in the " ◯ " position.

⊙ **When the engine is cold :**

1. Turn the carburetor choke lever all the way toward you.
2. Close the throttle grip and push the starter switch.
3. Immediately after the engine starter return the choke lever halfway and warm up the engine.
4. Return the choke lever all the way to its disengaged position.

⊙ **When the engine is warm :**

1. Open the throttle grip 1/8 ~ 1/4.
2. Push the starter switch.

⚠ CAUTION

Operation of the carburetor choke system is not necessary when the engine is warm.

⚠ WARNING

Running the engine indoors or in a garage can be hazardous.
Exhaust gas contains carbon monoxide, a gas that is colorless and odorless and can cause death or severe injury.
Only run the engine outdoors where there is a fresh air.

⚠ CAUTION

Running the engine too long without riding may cause the engine to overheat.
Overheating can result in damage to internal engine components and discoloration of exhaust pipes.
Shut the engine off if you cannot begin your ride promptly.

STARTING OFF

⚠ WARNING

Riding this motorcycle at excessive speed increases your chances of losing control of the motorcycle.
This may result in an accident.
Always ride within the limits of your skills, your motorcycle, and the riding conditions.

⚠ WARNING

Removing your hands from the handlebars or feet from the footrests during operation can be hazardous. If you remove even one hand or foot the motorcycle, you can reduce your ability to control the motorcycle.
Always keep both hands on th handlebars and both feet on the footrests of your motorcycle during operation.

⚠ WARNING

Sudden side winds, which can occur when being passed by large vehicles, at tunnel exits or in hilly areas, can upset your control.
Reduce your speed and be alert to side winds.

After moving the side stand to the fully upper position, pull the clutch lever in and pause momentarily. Engage first gear by depressing the gearshift lever downward.
Turn the throttle grip toward you and at the same time release the clutch lever gently and smoothly. As the clutch engages, the motorcycle will start moving forward. To shift to the next higher gear, accelerate gently, then close the throttle and pull the clutch lever in simultaneously. Lift the gearshift lever upward to select the next gear and release the clutch lever and open the throttle again.
Select the gears in this manner until fifth gear is reached.

USING THE TRANSMISSION

The transmission is provided to keep the engine operating smoothly in its normal operating speed range. The gear ratios have been carefully chosen to meet the characteristics of the engine. The rider should always select the most suitable gear for the prevailing conditions.

⚠ WARNING

Downshifting when engine speed is too high can ;
- **cause the rear wheel to skid and lose traction due to increased engine braking, resulting in an accident ; or**
- **force the engine to overrev in the lower gear, resulting in engine damage.**

Reduce speed before downshifting.

⚠ WARNING

Downshifting while the motorcycle is leaned over in a corner may cause rear wheel skid and loss of control.

Reduce your speed and downshift before entering corner.

RIDING ON HILLS

- When climbing steep hills, the motorcycle may begin to slow down and show lack of power. At this point you should shift to a lower gear so that the engine will again be operating in its normal power range. Shift rapidly to prevent the motorcycle from losing momentum.
- When riding down a steep hill, the engine may be used for braking by shifting to a lower gear.
- Be careful, however, not to allow the engine to overrev.

STOPPING AND PARKING

1. Turn the throttle grip away from you to close the throttle completely.
2. Apply the front and rear brakes evenly and at the same time.
3. Downshift through the gears as road speed decreases.
4. Select neutral with the clutch lever squeezed towards the grip(disengaged position) just before the motorcycle stops. Neutral position can be confirmed by observing the neutral indicator lamp.

⚠ WARNING

Inexperienced riders tend to underutilize the front brake. This can cause excessive stopping distance and lead to a collision. Using only the front or rear brake can cause skidding and loss of control.

Apply both brakes evenly and at the same time.

⚠WARNING

Hard braking while turning may cause wheel skid and loss of control.

Brake before you begin to turn.

⚠WARNING

Hard braking on wet, loose, rough, or other slippery surfaces can cause wheel skid and loss of control.

Brake lightly and with care on slippery or irregular surfaces.

⚠WARNING

Following another vehicle too closely can lead to a collision. As vehicle speeds increase, stopping distance increases progressively.

Be sure you have a safe stopping distance between you and the vehicle in front of you.

5. Park the motorcycle on a firm, flat surface where it will not fall over.

⚠WARNING

A hot muffler can burn you. The muffler will be hot enough to burn you for some time after stopping the engine.

Park the motorcycle where pedestrians or children are not likely to touch the muffler.

6. Turn the ignition key to the "OFF" position, or turn the handlebars all the way to the left and turn the "LOCK" position as push the ignition key.

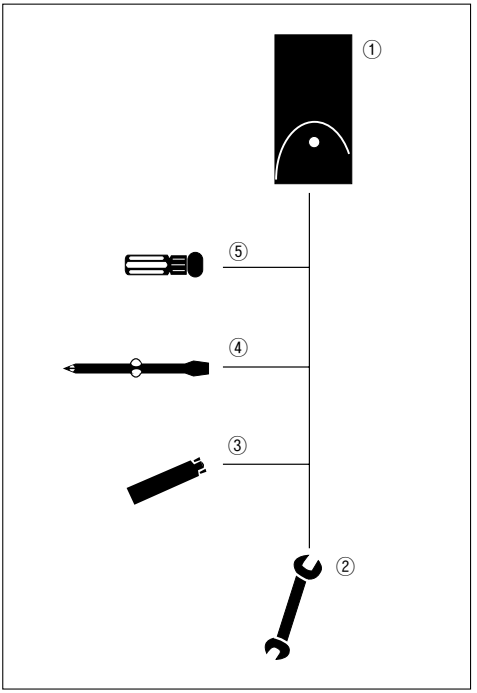
7. Remove the ignition key.

INSPECTION AND REPAIR

TOOL

To assist you in the performance of periodic maintenance, a tool kit is supplied and is located under the seat. The tool kit consists of the following items.

NO	NAME
1	Tool bag
2	10 × 12 mm open end wrench
3	Spark plug wrench
4	Combination screw driver
5	Screw driver handle



BATTERY

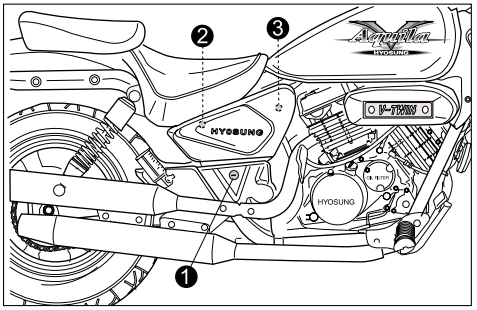
⊙ INSPECTION OF BATTERY SOLUTION LEVEL

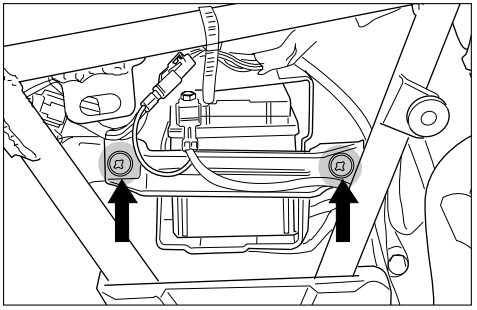
MF(Maintenance Free) battery of airtight type is used for this motorcycle.

It is not necessary to inspect or supplement battery fluid.

The battery is located behind the right frame cover.

However, have your dealer check the charging condition of battery periodically.





To remove the battery, loosen the screw ①, unhook the hook ②, ③ and remove the right frame cover.

After remove the frame cover, can pull it out as to take off the starter relay and fuse and separate the battery support.

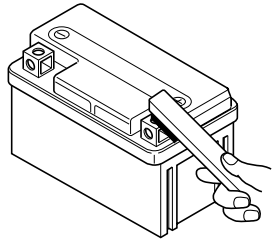
⚠ CAUTION

- **Do not remove absolutely airtight cover as airtight type battery.**
- **Keep after separate at the motorcycle for the minimum of self electric discharge and electric leakage when don t use for a long time.**
- **Remove the (−) negative terminal when keep intact at the motorcycle.**

⊙ CLEAN OF BATTERY TERMINAL

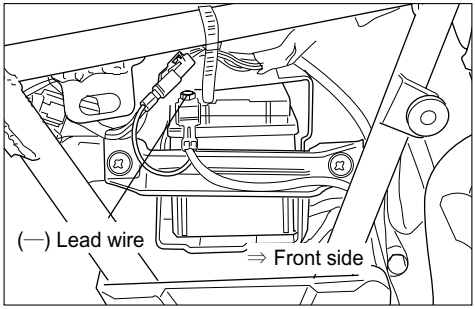
Clean the battery terminal when it is dusty or rusted.

1. Set the ignition switch "OFF" position.
2. Disassemble the battery cover, disassemble the (+)positive battery wire after the (−)negative battery wire.
   Remove the battery.
3. Clean the terminal.
   If there is white dust, clean it with warm water.
4. Assemble the battery wires and grease the terminal lightly.



⊙ **BATTERY INSTALLATION**

Aquila 250 's battery installation order pay attention to following points :



① Remove the seat, right frame cover and battery support.
② Lay down (+) positive terminal of the battery at leftside of the battery case (on the motorcycle).
③ Install (+) positive lead wire at the battery terminal.
④ Put on the rubber cap at the (+) positive terminal of the battery.
⑤ Install (—) negative lead wire at the battery terminal.
⑥ Install the battery support and right frame cover.

⚠ CAUTION

If install first the lead wire at the battery then lay down at the battery case, will be installed the opposite direction[(+) positive terminal face on the rightside of the motorcycle) as that length of the (+) lead wire has no something extra.
This time, the battery could not lay down perfectly and to occur the short circuit etc. if the battery install the opposite direction.

⚠ CAUTION

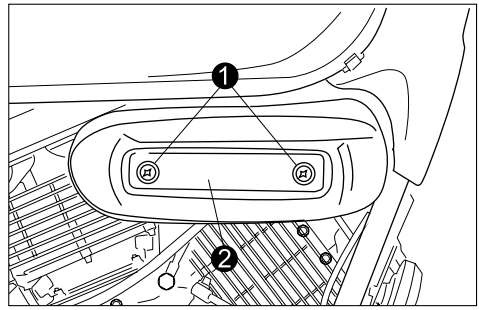
- **Keep the battery away from fires.**
- **When disassemble the battery wire, take off ⊖ terminal first with the ignition switch "OFF" position.**
  When assemble, ⊕ terminal first.
- **Fasten certainly the battery wires.**

AIR CLEANER

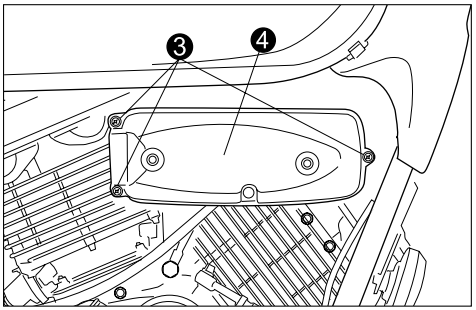
If the air cleaner element has become clogged with dust, intake resistance will increase with a resultant decrease in power output and an increase in fuel consumption. If riding under element must be cleaned or replaced more frequently than maintenance schedule. Check and clean the air cleaner element periodically according to the following procedure.

⚠ CAUTION

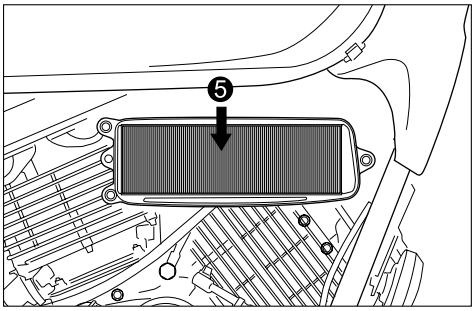
If the air cleaner element is polluted, will occur to starting go out, output insuffiency, combustion effciency decline, and sooty smoke(black smoke). This appearence is occurred at first to clean the air cleaner element and confirm.



1. Remove the screws ① and remove the cover ②.



2. Remove the screws ③ and take off ④.

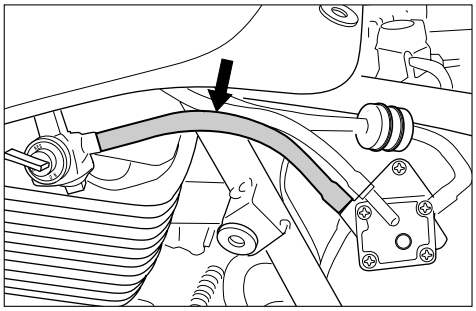


3. Remove the air cleaner element ⑤.
4. Clean the air cleaner element for the following:
   1) When the air cleaner element clean with the air gun, necessarily blow at the inside by compessed air.
   2) Carefully examine the air cleaner element for tears during cleaning. Replace it with a new one if it is torn.
   3) Assemble the element completely or damage severely the engine.
   4) Be careful not to allow water to go inside the air cleaner element.

⚠ CAUTION

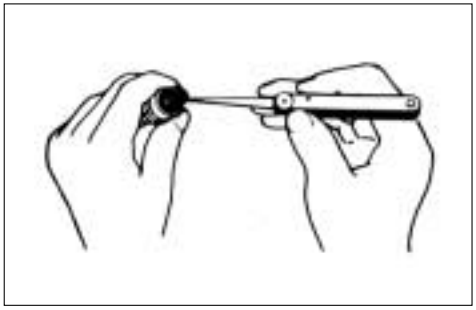
More frequent servicing may be performed on motorcycles that are used under severe conditions, also clean the air cleaner element when replacing the oil to prevent damgae of the engine.

FUEL HOSE

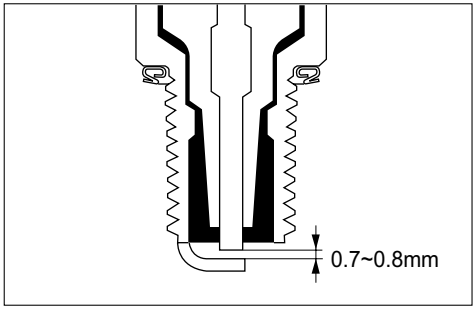


Inspect the fuel hose for damage and fuel leakage. If any defect are found the fuel hose must be replaced.
Replace the fuel hose every 4 years.

SPARK PLUG



Remove the carbon deposits periodically from the spark plug with a piece of hard wire or pin.



Readjust the spark plug gap to 0.7~0.8 mm (0.028~0.031 inch) by using a spark plug gap thickness gauge.

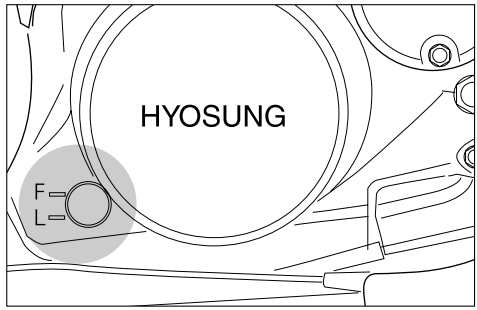
PLUG REPLACEMENT GUIDE	
Hotter type	CR7E
Standard type	CR8E
Colder type	CR9E

⚠ CAUTION

- **Do not over torque or cross thread the spark plug or the aluminum threads of the cylinder head will be damaged. Do not allow contaminants to enter the engine through the spark plug holes when the plug is removed.**
- **The standard spark plug for this motorcycle has been carefully selected to meet the vast majority of all operational ranges. If the spark plug color indicates that other than a standard spark plug be used, it is best to consult your Hyosung dealer before selecting an alternate plug or heat range. The selection of an improper spark plug can lead to severe engine damage.**

ENGINE OIL

Long engine life depends much on the selection of quality oil and the periodic changing of the oil.
Daily oil level checks and periodic changes are two of the most important maintenances to be performed.



⚠ CAUTION

Never operate the motorcycle if the engine oil level is below the "Lower line mark(L)" in the engine oil level gauge. Never fill the engine oil above the "Upper line mark(F)". Engine oil level being most suitable about 1mm under the "Upper line mark(F)" of the engine oil lens. In case of the engine oil pouring in excessively, the engine output being made insufficient.
Be careful not to pouring in the engine oil excessively.

⊙ ENGINE OIL LEVEL CHECK

Follow the procedure below to inspect the engine oil level.

1. Start the engine and run it for a few minutes.
2. Stop the engine and wait three minute.
3. Hold the motorcycle vertically and inspect the engine oil level through the engine oil level inspection window on the right side of the engine.

⚠ CAUTION

"Fuel and Engine oil" use certainly to recommend at the front part.

⊙ ENGINE OIL AND FILTER CHANGE

Change the engine oil and filter, after first running 1,000km and every running 4,000km.
The oil should always be changed when the engine is hot so that the oil will drain thoroughly from the engine. The procedure is as follows.

ENGINE OIL CAPACITY	
Replace	1,450 ㎖
Oil filter replace	1,500 ㎖
Overhaul	1,800 ㎖

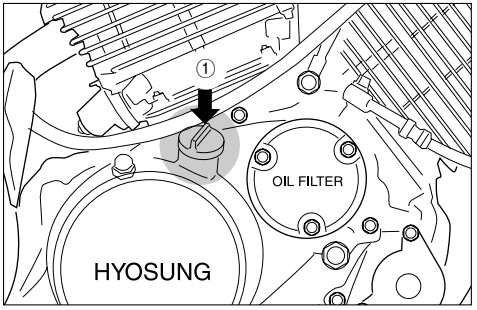
⚠ CAUTION

In case of the engine oil pouring in excessively, the engine output being made insufficient.
Be careful not to pouring in the engine oil excessively.

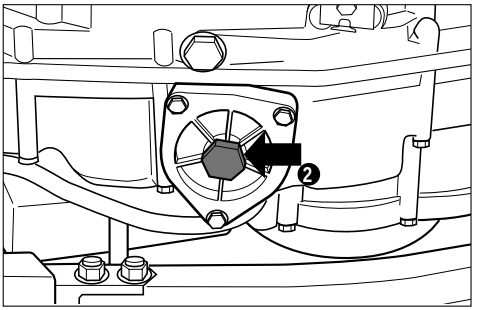
1. Place the motorcycle on the center stand, jack or block.

⚠ CAUTION

More frequent servicing may be performed on motorcycles that are used under severe conditions, inspect ① Quantity of Engine oil, ② Pollution degree of Engine oil before riding the motorcycle and then supplement and replace at any time to prevent damage of the engine.

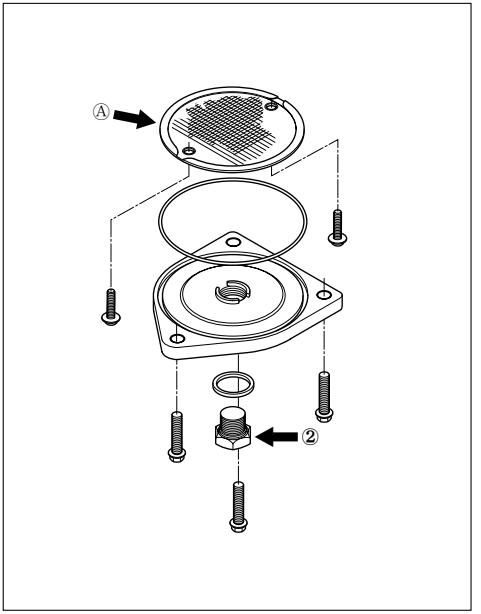


2. Remove the engine oil filler cap ①.

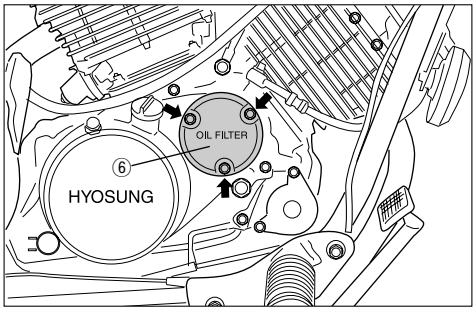


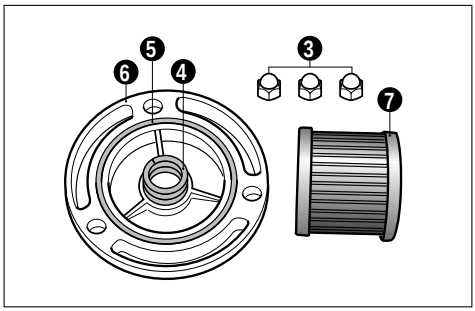
⚠ CAUTION

Necessarily, confirm and clean the oil strainer Ⓐ when replace the Engine oil(specially, when first replace ment).



3. Drain the oil by removing the drain plug ② located on the bottom of the engine.

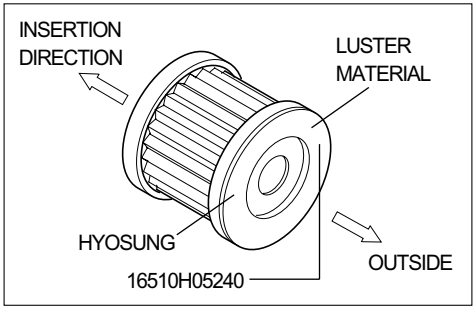




⚠ CAUTION

Insert the filter so that surface of the filter hole turn toward the engine.

● **OIL FILTER INSTALLATION**



⚠ CAUTION

When install the oil fiter, necessarily, "HYOSUNG" character and "16510H05240" part' s NO. install toward the outside, otherwise can damage the engine.

⚠ WARNING

Engine oil and exhaust pipes can be hot enough to burn you.

Wait until the oil drain plug and exhaust pipes are cool enough to touch with bare hands before draining oil.

⚠ WARNING

New and used oil and solvent can be hazardous. Children and pets may be harmed by swallowing new or used engine oil or solvent. Continuous contact with used engine oil has been found to cause skin cancer in laboratory animals. Brief contact with used oil or solvent may irritate skin.

- **Keep new and used oil and solvent away from children and pets.**
- **Wear a long-sleeve shirt and waterproof gloves.**
- **Wash with soaf if oil or solvent contact your skin.**

4. Remove the three nuts ③ holding the filter cap ⑥ in place.
5. Replace the engine oil filter ⑦ with a new one.
6. Before replacing the engine oil filter cover, be sure to check that the engine oil filter spring ④ and the "O"ring ⑤ are installed correctly. Use new "O"ring each time the engine oil filter element is replaced.
7. Replace the oil filter cover and tighten the nuts securely but do not over tighten them.

⚠ CAUTION

Approximately 1,450㎖ of oil must be required when changing oil only without replacing the oil filter.

8. Replace the drain plug and tighten it securely. Pour fresh oil through the filler hole. Approximately 1,500㎖ of oil will be required.

⚠ CAUTION

In case of the engine oil pouring in excessively, the engine output being made insufficient.
Be careful not to pouring in the engine oil excessively.

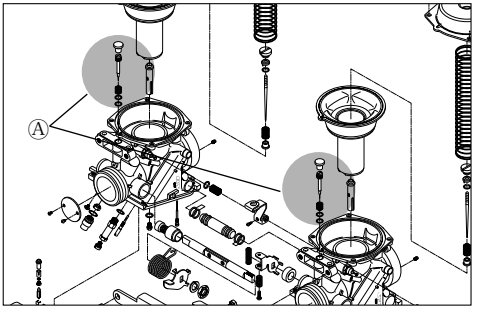
9. Operate the engine a few second by idling speed.
   Inspect to leak oil at the oil filter cap.
10. Confirm the oil level through the oil level lens after waiting about a minute next to stopping the engine.
    The oil level is located between the "Lower line(L)" and the "Upper line(F)".
    When below the "Lower line(L)", refill the oil between the "Lower line(L)" and the "Upper line(F)".

CARBURETOR

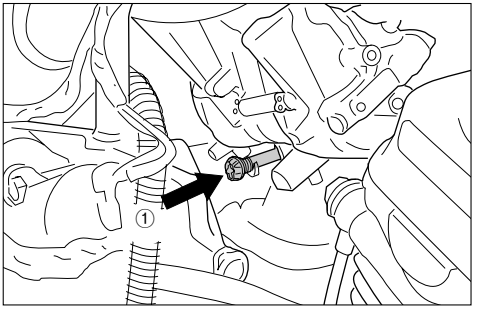
Aquila 250 eqipped one set of composed the two carburetors for efficiency increase of the two cylinder.
The carburetor is from the factory setting for the best carburetion. Do not attempt to alter its setting. There are two items of adjustment, however, under your care : idle speed and throttle cable play.

⚠ CAUTION

Never adjust "CO adjust screw" Ⓐ of the carburetor.
If adjust optionally, exert a bad influence upon output of the engine as the two carburetor is disharmonious.



⊙ IDLE SPEED ADJUSTMENT

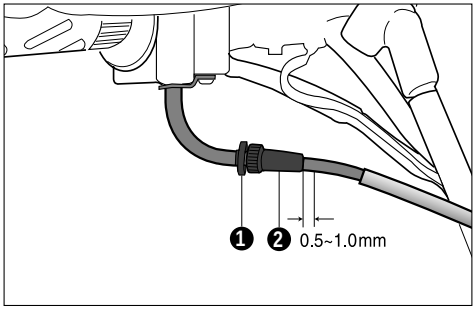


1. Start up the engine and let the engine run until it warms up fully.
2. After engine warms up, turn the throttle stop screw ① located on the carburetor in or out so that engine may run at 1,450～1,550rpm.

⚠ CAUTION

The engine idle speed should be adjusted with the engine fully warm.

⊙ **THROTTLE CABLE ADJUSTMENT**



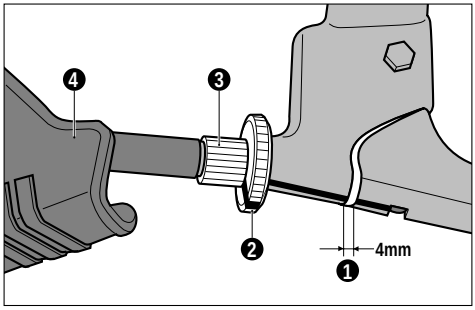
1. Loosen the lock nut ①.
2. Adjust the cable slack by cable adjuster ② in or out to obtain the correct slack 0.5~1.0mm (0.02~0.04in).
3. After adjusting the slack, tighten the lock nut.

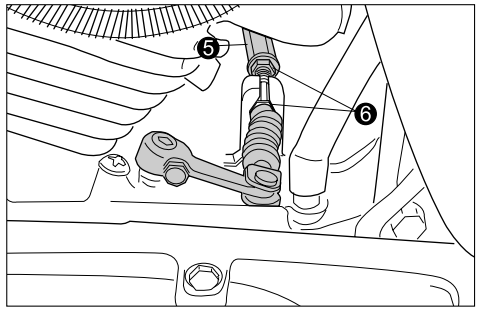
⚠ CAUTION

After completing throttle cable adjustment, check that handlebar movement does not raise the engine idle speed and that the throttle grip return smoothly and automatically.

CLUTCH ADJUSTMENT

At each maintenance interval, adjust the clutch cable play by means of clutch cable adjuster.
The cable play should be 4mm(0.16in) as measured at the clutch lever holder before the clutch begins to disengage.





① The clutch lever play
② The lock nut
③ The clutch lever adjuster
④ The rubber boot
⑤ The cable adjuster
⑥ The clutch cable adjuster lock nut

If you find the play of the clutch incorrect, adjust it in the following way :

⊙ **CLUTCH CABLE**

1. Loosen the lock nut ② and the clutch lever adjuster ③ turn all the way toward clockwise.
2. Loosen the clutch cable adjuster lock nut ⑥. Turn the cable adjuster ⑤ that the clutch lever play ① should be 4mm(0.16in).
3. A little adjustment be allowed by the clutch lever adjuster ③.
4. After end of adjustment, tighten the lock nut ②, ⑥ and cover the rubber boot ④.

DRIVE CHAIN

The chain may require more frequent adjustment that it is with periodic maintenance depending upon your riding conditions.
Check the chain every 1,000km.

⚠ WARNING

Riding with the chain in poor condition or improperly adjusted can lead to an accident.

Inspect, adjust, and maintain the chain properly before each ride, according to this section.

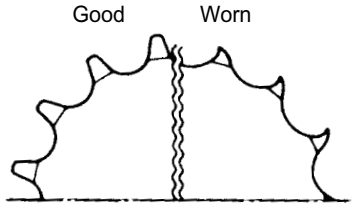
☉ **Insepcting the Drive Chain**

When inspecting the chain, look for the following:

- Loose pins
- Damaged rollers
- Dry or rusted links
- Kinked or binding links
- Excessive wear
- Improper chain adjustment

If you find something wrong with the drive chain condition or adjustment, correct the problem if you know how. If necessary, consult your authorized Hyosung dealer.

Damage to the drive chain means that the sprockets may also be damaged. Inspect the sprockets for the following:



- Excessively worn teeth
- Broken or damaged teeth
- Loose sprocket mounting nuts

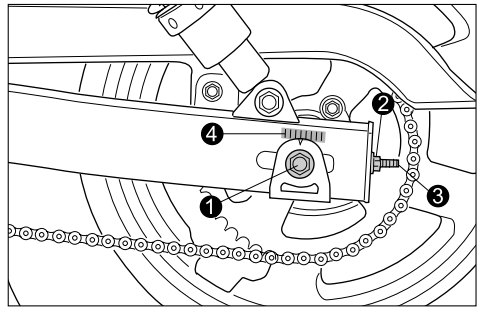
If you find any of these problems with your sprocket, consult your Hyosung dealer.

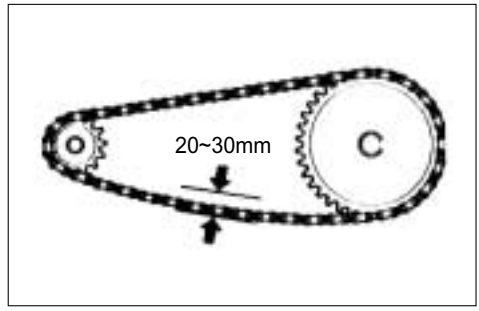
⚠ CAUTION

The two sprockets should be inspected for wear when a new chain is installed and replace them if necessary.

☉ **DRIVE CHAIN ADJUSTMENT**

Chain adjust in the following way.





(1) Place the motorcycle on the jack or block.
(2) Loosen the axle nut ①.
(3) Adjust the slack in the drive chain by adjuster ③ as the lock nut ② turning toward the left and right.
(4) For alignment of the rear sprocket and the front sprocket, there are reference mark ④ on the same position.
After aligning and adjusting the slack in the drive chain to 20~30mm (0.79~1.18 in), retighten the axle nut securely and perform a final inspection.

⚠ CAUTION

The drive chain for this motorcycle is made of the special material.
The chain should be replaced with a 520DS.
Use of another chain may lead to premature chain failure.

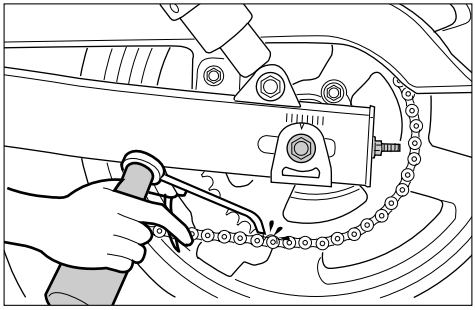
⚠ CAUTION

The drive chain should be inspected every time before riding.
Excessive chain slack could cause the chain to come off the sprockets and result in accident or serious engine damage.

⚠ WARNING

Be careful not to touch the muffler when it is hot : a hot muffler can burn you.

⊙ DRIVE CHAIN CLEANING AND OILING



If the drive chain become dirty, the drive chain and the sprocket is wore easily. This times, clean the drive chain with solvent and oil every 1,000km with lubricating oil or motor oil.

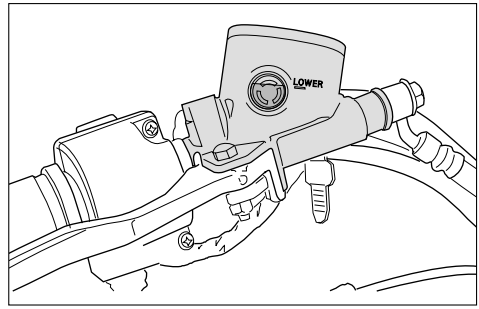
BRAKES

Properly operating the brake systems are vital to safe riding. Be sure to perform the brake inspection requirements as schedules.
The brakes should be inspected at periodic inspection by your authorized Hyosung dealer.

⊙ FRONT BRAKE

● BRAKE FLUID

Be sure to check the brake fluid level in the master cylinder. If the level was found to be lower than the lower mark while holding the motorcycle upright, replenish with the proper brake fluid that meets Hyosung's requirements.
As the brake pads wear, the fluid level will drop to compensate for the new position of barke pads.
Replenishing the master cylinder to considered normal periodic maintenance.



⚠ WARNING

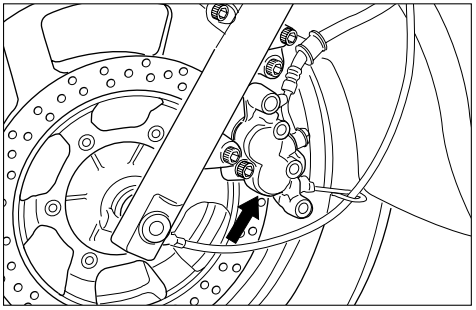
Brake fluid may be harmful or fated if swallowed and harmful if it comes in contact with skin or eyes. Contact your physician immediately. If swallowed induce vomiting. If brake fluid gets into the eye or in contact with the skin, it should be flushed thoroughly with plenty of water.

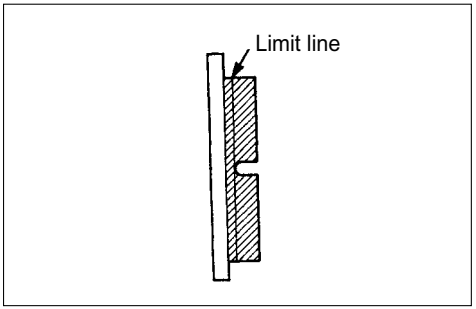
⚠ CAUTION

This motorcycle uses glycol-based brake fluid. Do not use or mix different types of brake fluid such as silicone-based or petroleum-based fluid, otherwise serious damage will result in the brake system.
Use only DOT3 or DOT4. Do not spill any brake fluid on painted or plastic surfaces as it will damage the surface severely.

● BRAKE PADS

Inspect the front brake pads by nothing whether or not the friction pads are worn down to the grooved limit line. If a pad is worn to the grooved limit line it must be replaced with a new one by your authorized Hyosung dealer or qualified service machanic.





Inspect every day in the following point at the brake system.

① Brake fluid leak of the front brake system.
② Leak or damage of the brake hose.
③ Operating of the brake lever.
④ Wear of the front brake pads.

⚠ CAUTION

The front brake system be replaced the brake hose or the brake fluid according to periodic inspection chart by your authorized Hyosung dealer for safety as in times of operating at high pressure.

⚠ WARNING

Riding with worn brake pads will reduce braking performance and will increase your chance of having accident. Inspect brake pad wear before each use. Ask your Hyosung dealer or qualified mechanic to replace brake pads if any pad is worn to the limit.

⚠ CAUTION

After replaced the front brake pads, the brake lever pull and release several times so that it is setting at the original place.
Then, do not riding the motorcycle untill operating the brake fluid and becoming the brake distance.

● FRONT BRAKE LAMP SWITCH

The front brake lamp switch is located beneath the front brake lever. Loosen the switch fitting screws and adjust the timing by moving the switch body forward or backward.

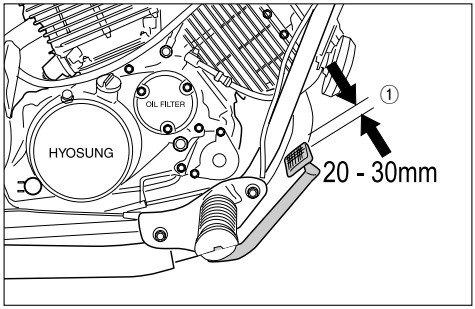
⊙ **REAR BRAKE**

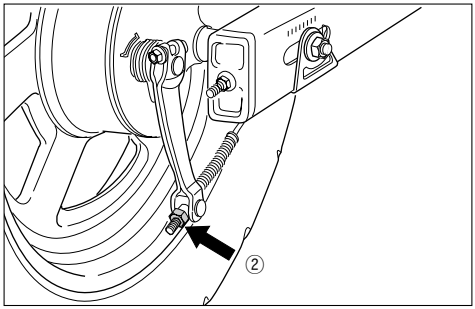
● **REAR BRAKE ADJUSTMENT**

⚠ WARNING

Too much clearance in the rear brake pedal can cause poor braking performance and may lead to an accident. Too little clearance may force brake shoes to rub against the drum at all times, causing damage to the shoes and the drum.

Follow the steps in this section to adjust the rear brake pedal properly.



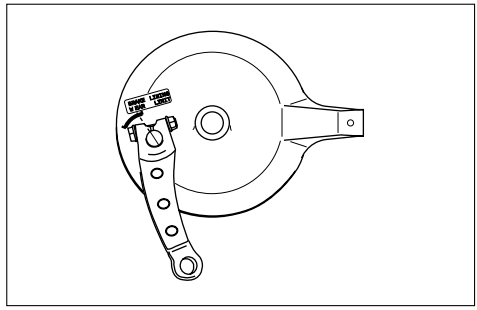


Adjust the free travel ① to 20~30 mm (0.79~1.18 in)by screwing in or out the brake adjusting nut ②.

● **BRAKE LINING WEAR LIMIT**

The motorcycle is equipped with the brake lining wear limit indicators on the rear brakes.

To check wear of the brake lining, perform the following :



① Check if the brake system is properly adjusted.

② While fully applying the brake, check to see that the extension line of the index mark is within the range on the brake panel.

③ If the extension line is beyond the range, have the brake shoe assembly replaced by your Hyosung dealer to ensure safe operation.

⚠ WARNING

Riding with worn brake shoe will reduce braking performance and will increase your chance of having an accident.
Inspect brake shoe wear before each use. Ask your Hyosung dealer or qualified mechanic to replace brake shoe if the shoes are worn to the limit.

● **REAR BRAKE LAMP SWITCH**

The rear brake lamp switch is located at right-side of the engine.

Move the switch up or down to adjust it until the switch operates and turns on the brake lamp after the brake pedal begins to be depressed.

TIRE

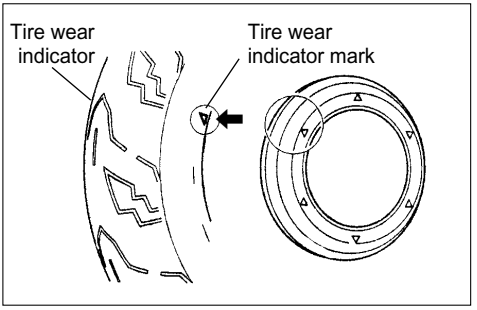
Inspect the tire pressure and the tire thread depth periodically.
Inspect frequently the tire pressure for the safety and the tire life.

⊙ TIRE PRESSURE

Insufficient air pressure in the tires not only hasten tire wear but also seriously affects the stability of the motorcycle.
Under-inflated tires make smooth cornering difficult and over-inflated tires decrease the amount of tire in contact with the ground which can lead to skids and loss of control. Be sure that the tire pressure is within the specified limits at all times.
Tire pressure should only be adjusted when the tire is cold.

TIRE PRESSURE (COLD INFLATION)	NORMAL RIDING	
	SOLO RIDING	DUAL RIDING
FRONT	1.75 kg/㎠ 172 kpa 25 psi	1.75 kg/㎠ 172 kpa 25 psi
REAR	2.00 kg/㎠ 196 kpa 29 psi	2.25 kg/㎠ 221 kpa 32 psi

⊙ TIRE TREAD CONDITION

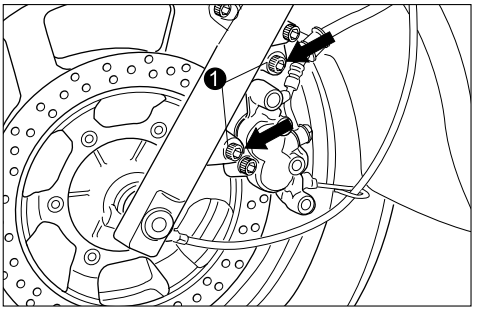


Operating the motorcycle with excessively worn tire will decrease riding stability and can lead to loss of control.
Inspect stortage of tire thread's depth by the 『tire wear indicator』.
Replace the front and rear tires at once when appear the 『tire wear indicator』.

⊙ TIRE REPLACEMENT

● FRONT TIRE REPLACEMENT

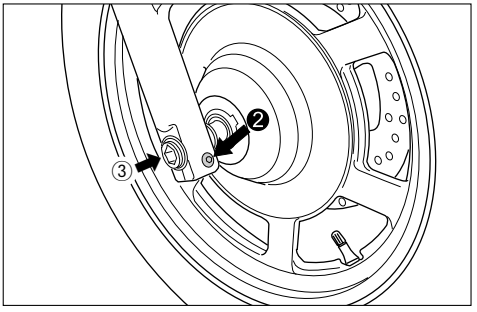
1. Place the motorcycle on the center stand.



2. Remove the caliper from the front fork by removing the mounting bolts ①.

⚠ CAUTION

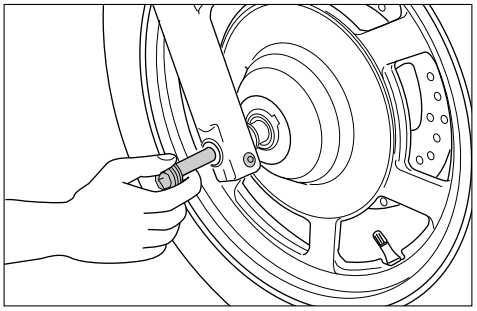
Never squeeze the front brake lever with the caliper removed. It is very difficult to force the pads back into the caliper assembly and brake fluid leakage may result.



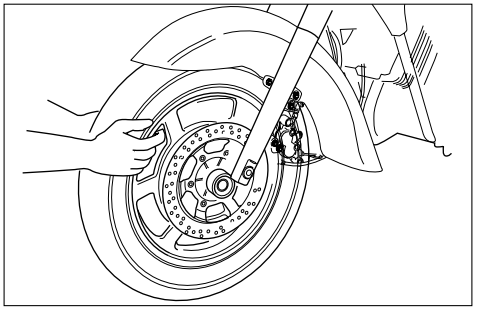
3. Loosen the front axle pinch bolt ②.
4. Loosen the front axle ③.
5. Carefully position a jack or block under engine and raise until the front wheel is slightly off the ground.

⚠ CAUTION

Improper jaking may cause damage to the oil filter.
Do not apply the jack head to the oil filter when jacking up the motorcycle.



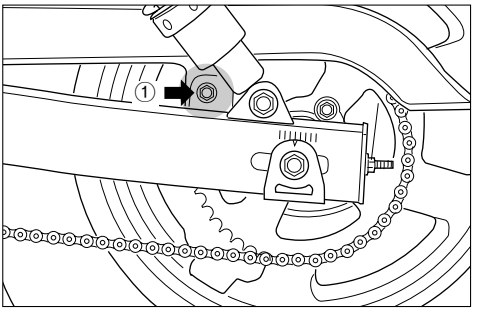
6. Draw out the axle shaft.



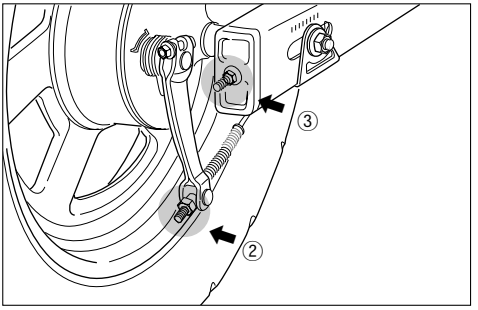
7. Slide the front wheel forward.
8. To reinstall the wheel assembly, reverse the sequence as described.

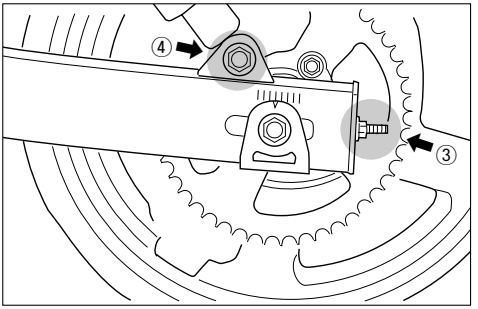
⊙ REAR TIRE REPLACEMENT

1. Place the motorcycle on the center stand.



2. Remove the two screw ① and chain case.



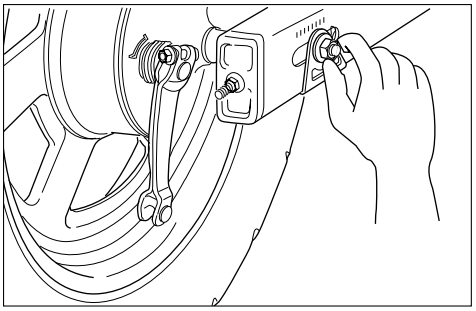


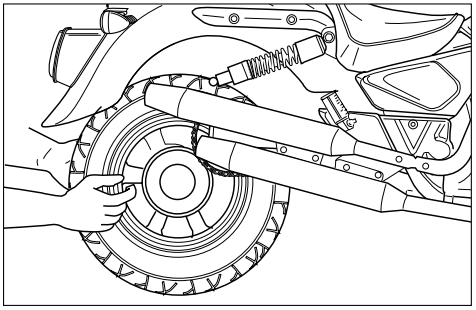
3. Remove the brake adjuster nut ②, and place a jack or block under the swing arm to lift the rear wheel slightly off the ground.

⚠ WARNING

A hot muffler can burn you. The muffler will be hot enough to burn you for some time after stopping the engine.
Wait until the muffler cools to avoid burns.

4. Loosen the drive chain adjuster ③, left and right, and disengage the drive chain from the rear sprocket.
5. Remove the rear break hub from the swing arm.
6. Loosen the rear shock absorber lower bolt ④, left and right, draw out the rear axle with the rear wheel push to the bottom.





7. Pull the rear wheel assembly rearward.
8. To replace the wheel, reverse the complete sequence listed.

⚠ CAUTION

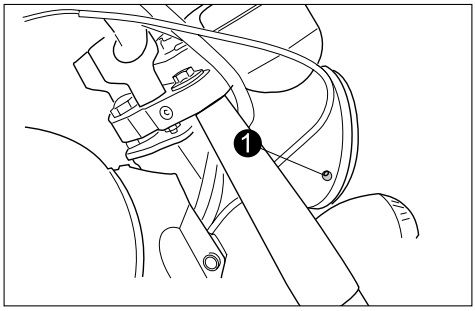
The standard tire on *Aquila 250* is 110/90-16 59S for front, and 150/80-15M/C 70S for rear.
The use of a tire other than standard may cause trouble. It is highly recommended to use the standard tire supplied by Hyosung.

REPLACE OF THE LAMP

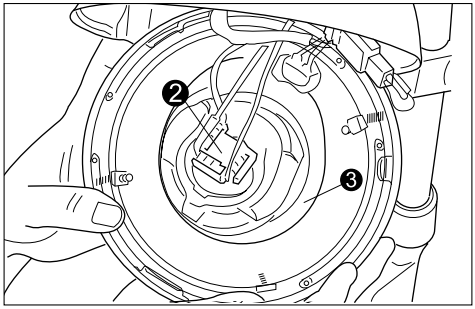
Requirement electric power of the lamp is following the chart.
When replace the damaged lamp, always use the equal capacity.
The use of a lamp other than rules may cause to excessive at the electric system or to damage the lamp.

NAMES		CAPACITY
Head lamp	HI	35 W
	LO	35 W
Position lamp		5 W
Brake / Tail lamp		21/5 W
Turn signal lamp		10 W
License lamp		5 W

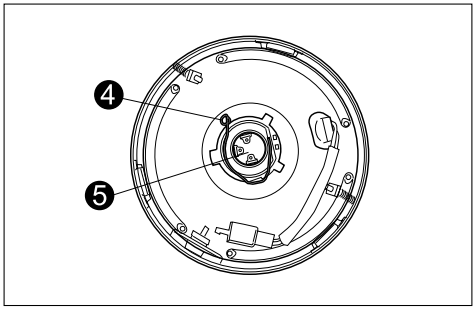
⊙ **HEAD LAMP**



1. Remove the two screw ① (right and left) and the headlamp assembly.



2. Disconnect the socket ② from the headlamp.
3. Remove the rubber cap ③.

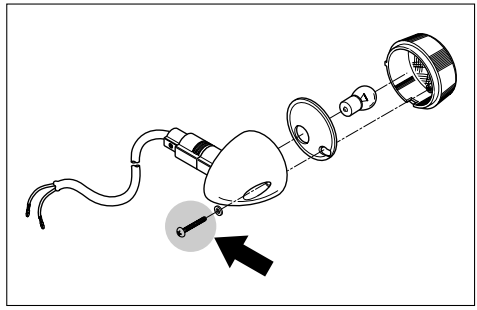


4. Umhook the bulb holder spring ④ and remove the bulb ⑤.
5. To install the headlamp, reverse the above sequence.

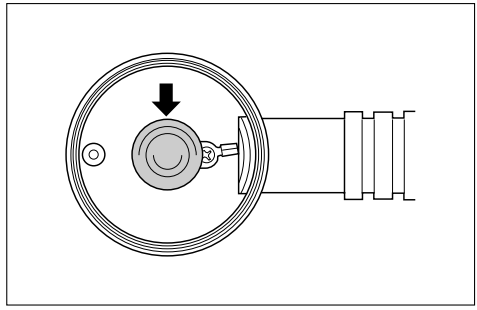
⚠ CAUTION

The use of a lamp other than rules may cause to occur the vehicle fire and to damage at electric parts.
Surely use only the lamp of proper capacity.

⊙ **TURN SIGNAL LAMP**

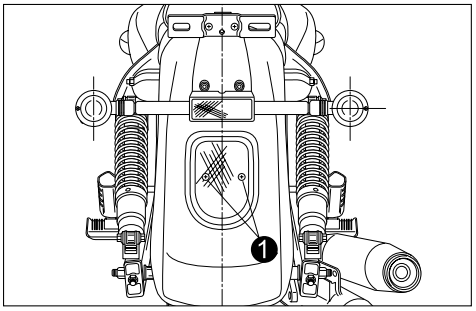


1.Remove the lens by removing the screw.

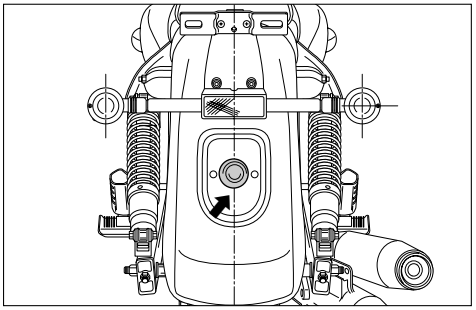


2. Push in the bulb, turn it to the counter-clockwise, and pull it out.
3. After stick in the new lamp, assemble the lens.

⊙ TAIL/BRAKE LAMP

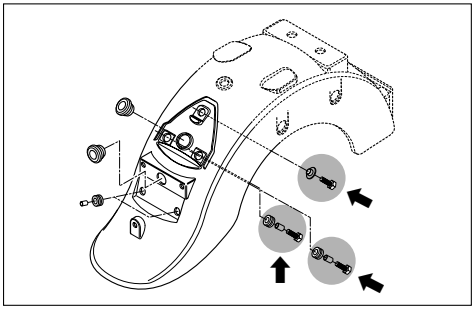


1. Remove the screws ① and the lens.

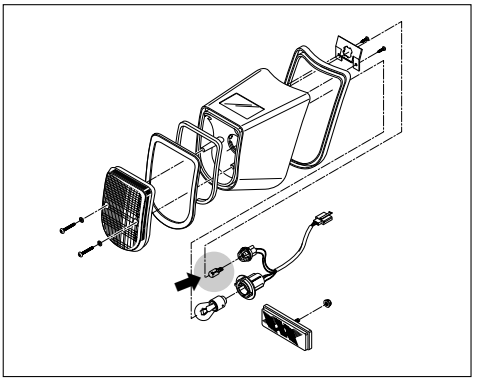


2. Push in the bulb, turn it to the counter-clockwise, and pull it out.
3. To fit the replacement bulb, push it in and turn it to the clockwise while pushing.

⊙ LICENSE PLATE LAMP



1. Remove the three nuts at the seat tail cover.

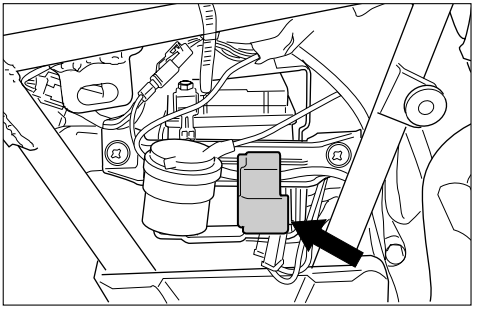


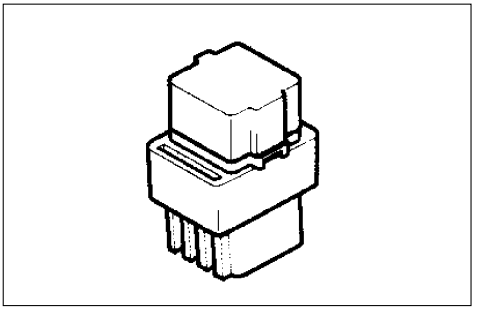
2. Remove the tail & brake lamp cover.
3. Push in the bulb, turn it to the counter-clockwise, and pull it out.
4. After stick in the new lamp, assemble the lens.

⚠ CAUTION

Overtightening the screws may cause the lens to crack.

⊙ FUSE





The fuse box is located behind the right frame cover. If the engine suddenly stops while running or any electrical system fails to operate then the fuse must be checked.
In case a fuse blows there is a 15A spare fuse.

⚠ CAUTION

Never use other than specified 15A fuse.
Installing a fuse of incorrect rating may seriously damage the electrical system.
You should consult your Hyosung dealer or a qualified service mechanic immediately.

WHEN THE ENGINE REFUSES TO START

⊙ TROUBLE SHOOTING

If the engine refuses to start, perform the following inspections to determine the cause.

● Fuel Supply Check

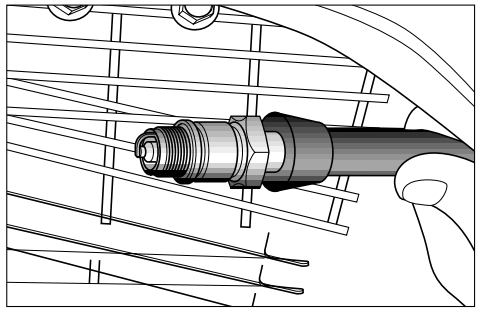
① Is there enough fuel in the fuel tank?
② Is the fuel reaching the carburetor from the fuel cock?
③ Disconnect the fuel line from the carburetor, turn the fuel cock to the "ON" position and see if gasoline flows from the hole.
④ If it has been determined that fuel is reaching the carburetor, the ignition system should be checked next.

⚠ CAUTION

Do not allow the fuel to spill.
Catch the fuel in container.
Do not allow any fuel to come in contact with the hot engine or exhaust system.
Extinguish any smoking materials before performing this check, and stay away from any other fire or heat source.

● Ignition System Check

① Remove a spark plug and reattach to the spark lead.
② While holding the spark plug firmly against the engine, crank the engine with the ignition switch in the "ON" switch.
③ If the ignition system is operating properly, a blue spark should jump across the spark plug gap.
If there is no spark, consult your Hyosung dealer for repairs.



⚠ WARNING

Do not hold the spark plug close to the open spark plug hole in the cylinder head as gasoline vapor inside the cylinder should be ignited, creating a fire hazard.

● Engine Starting

① Check the fuel supply in the fuel tank.
② Check the ignition system for intermittent spark.
③ Check the engine idle speed.

⚠ CAUTION

When occur any trouble, the best way is to consult your Hyosung dealer for repairs.

WHEN KEEPING FOR LONG PERIOD

1. Supply enough the fuel in the fuel tank.
2. Do the fuel cock in the "OFF" position.
3. Do drain wholly the fuel in the carburetor.
4. Remove the battery from the motorcycle.

SPECIFICATIONS

DIMENSIONS AND DRY MASS

Overall length	2,270mm(89.4in)
Overall width	800mm(31.5in)
Overall height	1,090mm(42.9in)
Wheelbase	1,500mm(59.1in)
Ground clearance	155mm(6.1in)
Mass	170kg(375lbs)

ENGINE

Type	Four-stroke, air-cooled and oil-cooled
Number of cylinder	V-2 cylinder
Bore	57.0mm(2.24in)
Stroke	48.8mm(1.92in)
Piston displacement	249cm^3 (15.2in^3)
Corrected compression ratio	10.2 : 1
Carburetor	BDS 26 TYPE(DOUBLE)
Starter system	ELECTRIC STARTER

TRANSMISSION

Clutch	Wet shoe, Mechanical pressure plate type
Reduction ratio	2.460~0.840
Drive chain	520, 116 Links
Primary	3.05
Transmission	1st : 2.460
	2nd : 1.560
	3rd : 1.190
	4th : 0.960
	5th : 0.840
Final	3.29

CHASSIS

Front suspension	Telescopic type
Rear suspension	Swing arm type
Caster	33°
Trail	135mm(5.32in)
Steering angle	40° (right & left)
Front tire size	110/90-16 59S
Rear tire size	150/80-15M/C 70S
Front brake	Disc
Rear brake	Drum

ELECTRICAL

Ignition type	"CDI" type
Ignition timing	13° B.T.D.C.at 2,000 rpm ~ 30° B.T.D.C.at 6,000 rpm
Spark plug	CR8E
Battery	12V 6Ah (MF)
Fuse	15A
Headlamp	HI : 35 W · LO : 35 W
Position lamp	5W
License plate lamp	5W
Neutral indicator lamp	1.7W
High beam indicator lamp	1.7W
Turn signal lamp	10W
Brake/Tail lamp	21/5W
Speedometer lamp	1.7W×3
Turn signal indicator lamp(right & left)	1.7W×2

CAPACITIES

Fuel tank	14.0 ℓ
Engine oil	1,450㎖ (Replace) 1,500㎖ (Oil filter replace) 1,800㎖ (Overhaul)

Prepared by

HYOSUNG MOTORS & MACHINERY INC.

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Printed in KOREA

⚠ WARNING

Noise Control System (muffler assembly)
TAMPERING WITH NOISE CONTROL SYSTEM PROHIBITED

Owners are warned that the law may prohibit :

(a) The removal or rendering inoperative by any person other than for purpose of maintenance, repair or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its any sale of delivery to the ultimate purchaser or while it is in use ; and

(b) The use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

MAINTENANCE :

The exhaust system of this motorcycle requires no periodic maintenance. The engine should be adjusted to the manufacturer s specifications and the spark plug should be kept in good condition. Running the engine with incorrectly operating spark plug or misadjusted carburetor may cause permanent damage to the catalyst and to the noise control system.